

Pet Waste and Water Quality

Fact Sheet 703

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Are You Polluting Our Lakes and Streams and the Chesapeake Bay?

Pet waste left to decay on the sidewalk, or on grass near the street, may be washed into storm sewers by rain or melting snow. Storm sewers usually do not go to a sewage treatment plant. Instead, most storm sewers drain directly into our waterways, carrying many pollutants along with the water. Most of the drainage in Maryland eventually enters the Chesapeake Bay.

Many substances deposited on the land cause pollution in urban lakes, streams, and rivers. They include the following:

- Pesticides
- Household chemicals
- Fertilizers
- •Oil and antifreeze
- Pet waste

When pet waste is washed into lakes or streams, the waste decays, using up oxygen and sometimes releasing ammonia. Low oxygen levels and ammonia combined with warm temperatures can kill fish.

Pet waste also contains nutrients that encourage weed and algae growth. Overly fertile water becomes cloudy and green—unattractive for swimming, boating, and fishing. Excess nutrients are a major cause of the decline of the Chesapeake Bay.

Perhaps most importantly, pet waste may carry disease-causing organisms, which make water unsafe for swimming or drinking.

Are You Risking Your Health?

When pet waste is disposed of improperly, not only water quality suffers—your health may be at risk, too. Pets, children playing outside, and adults gardening are most at risk for infection from some of the bacteria and parasites found in pet waste. Flies may also spread diseases from animal waste. Diseases that can be transmitted from pet waste to humans include the following:

Campylobacteriosis. A bacterial infection carried by dogs and cats that frequently causes diarrhea in humans.

Salmonellosis. The most common bacterial infection transmitted to humans by other animals. Symptoms include fever, muscle aches, headache, vomiting, and diarrhea.

Toxocariasis. Roundworms, usually transmitted from dogs to humans, often without noticeable symptoms, but may cause temporary vision loss, a rash, fever, or cough.

Toxoplasmosis. A protozoan parasite carried by cats that can cause birth defects such as mental retardation and blindness if a woman becomes infected during pregnancy. It is also a problem for people with depressed immune systems. Symptoms include headache, muscle aches, and lymph node enlargement.

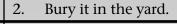
Pet waste is one of the many small sources of pollution that add up to a big problem for water quality. Fortunately, there are some simple things pet owners can do to help keep our water clean. See the reverse for ways to keep pet waste out of local waterways.

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You Can Make a Difference

Cleaning up after your pet can be as simple as taking a plastic bag or pooper scooper along on your next walk. What should you do with waste you pick up? No solution is perfect, but here are the choices:

1. Flush it down the toilet.



3. Put it in the trash.



1. The water from your toilet goes to a sewage treatment plant that removes most pollutants before the water reaches a lake or stream.

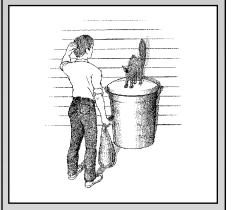
To prevent plumbing problems, don't try to flush debris such as rocks, sticks, or cat litter. Cat feces may be scooped out and flushed down the toilet, but used litter should be put in a securely closed bag and then put in the trash.



- **2.** Dig a hole or trench that is:
 - about 5 inches deep;
 - away from vegetable gardens; and
 - away from any lake, stream, ditch, or well.

Microorganisms in the top layer of soil will break down the waste and release nutrients to fertilize nearby plants.

Be cautious. Keep pet waste away from vegetable gardens and water supplies to prevent disease. Don't add pet waste to your compost pile. The pile will not get hot enough to kill disease organisms in pet waste.



3. If you put pet waste in the trash, wrap it carefully so it will not spill during trash collection.

Another option is to install an underground pet waste digester that works like a small septic tank. Check local laws or neighborhood covenants that may restrict their use, design, or location.

Be sure to place a digester in loose soil. It will not work properly in heavy clay or compacted soil. In choosing a location for a digester, follow the precautions mentioned in the section about burying pet waste.

A Few Words of Caution

Around Your Home

If you leave pet waste to decay in your yard, be sure it does not become a problem. To prevent water pollution, clean up areas near wells, sewer inlets, ditches, and waterways. Always remove waste from areas where children play. They are the most frequent victims of diseases from pet waste. Of course, excellent protection for children and adults is to wash hands with soap and water.

In Your Community

Many communities have "pooper scooper" laws that govern pet waste cleanup. These laws require people who take an animal off their property to clean up waste left by the animal immediately. Call your local government to find out more about pet waste laws in your neighborhood.

Adapted from "Pet Waste and Water Quality," University of Wisconsin, Extension, 1993.